

Title (en)

Oscillator phase noise reduction by self tuning filter and noise feedback

Title (de)

Oszillator-Phasenrauschverringerng durch Selbsteinstellung der Filter- und Rauschrückmeldung

Title (fr)

Réduction de bruit de phase d'oscillateur par un réglage automatique du filtre et réponse sonore

Publication

EP 2144370 B1 20120201 (EN)

Application

EP 08012269 A 20080708

Priority

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Abstract (en)

[origin: EP2144370A1] Method to reduce the phase noise in an oscillator by means of a self tuning filter and/or noise feedback. Self tuning of the filter is achieved by a phase locked loop using the phase shift generated by the filter if an offset occurs. The delay caused by the filter is used to generate a feedback signal for further noise reduction The noise feedback uses the delay caused by the filter and locks the oscillator.

IPC 8 full level

H03J 3/20 (2006.01); **H03L 7/081** (2006.01)

CPC (source: EP US)

H03J 3/00 (2013.01 - EP US); **H03J 3/20** (2013.01 - EP US); **H03L 7/02** (2013.01 - EP US); **H03L 7/1075** (2013.01 - EP US);
H03J 2200/08 (2013.01 - EP US)

Cited by

CN111095797A; US9094133B2; US9088369B2; WO2016014130A3; US9330214B2; US9917548B2; US9979372B2; US10224872B2;
US10574183B2; US10666191B2; US10958214B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

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WO 2010005542 A1 20100114

DOCDB simple family (application)

EP 08012269 A 20080708; AT 08012269 T 20080708; US 2009003954 W 20090706; US 200913002901 A 20090706